Open Water Evaporation: From Measurement to Application

While many approaches have been developed for measuring evaporation loss, scientific and practical constraints make it much harder to do over open water, especially to support real-time water management. The Bureau of Reclamation along with partners at the Desert Research Institute have been working to evaluate different open water evaporation measurement methods and develop an approach Reclamation can use more broadly to improve water management and planning. Currently we have two field locations, Lake Powell and two smaller reservoirs in southern Oregon where we are measuring open water evaporation. In addition, Reclamation and DRI are working to develop models and tools to estimate evaporation under different environmental conditions and estimate evaporation using remotely sensed data. This talk will discuss approaches for measuring and modeling open water evaporation, our ongoing case studies, the operational need for improved evaporation estimates and where the science and management communities are headed.



Here's a teaser image of our platform on Padre Bay in Lake Powell.